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KAISER•HILL  
COMPANY

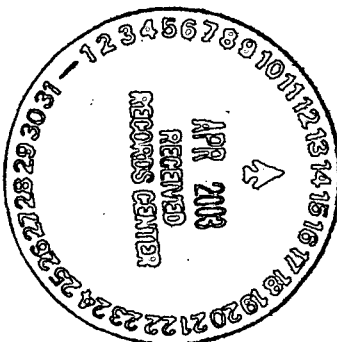
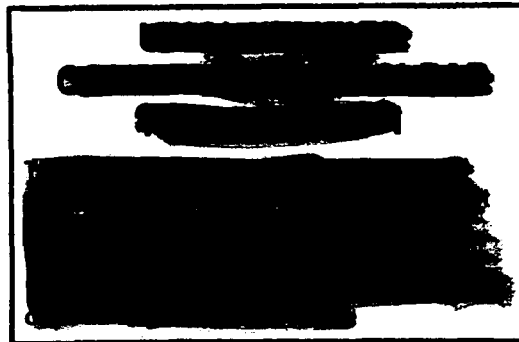
Rocky Flats Environmental Technology Site  
Golden, Colorado

INTEGRATING CONTRACTOR  
KAISER-HILL L.L.C.

DOES NOT CONTAIN  
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Reviewing  
Official: S. L. CUNNINGHAM *SCC*  
Name  
Date: 4/10/03

Reviewing  
Official: S. L. CUNNINGHAM  
Name  
Date: 5/1/96



ADMIN RECORD  
IA-A-001370



**Rocky Flats Environmental Technology Site**  
**Golden, Colorado**  
**INTEGRATING CONTRACTOR, KAISER-HILL L.L.C.**

Jul 27 1995

4766-01

三、四、五、六、七、八、九、十、十一、十二、十三、十四、十五、十六、十七、十八、十九、二十、二十一、二十二、二十三、二十四、二十五、二十六、二十七、二十八、二十九、三十、三十一、三十二、三十三、三十四、三十五、三十六、三十七、三十八、三十九、四十、四十一、四十二、四十三、四十四、四十五、四十六、四十七、四十八、四十九、五十、五十一、五十二、五十三、五十四、五十五、五十六、五十七、五十八、五十九、六十、六十一、六十二、六十三、六十四、六十五、六十六、六十七、六十八、六十九、七十、七十一、七十二、七十三、七十四、七十五、七十六、七十七、七十八、七十九、八十、八十一、八十二、八十三、八十四、八十五、八十六、八十七、八十八、八十九、九十、九十一、九十二、九十三、九十四、九十五、九十六、九十七、九十八、九十九、一百。

[illegible]

**Demolition, Decontamination and  
Decommissioning (D&D) Projects,  
Deactivation Projects,  
and Remediation Projects  
In-Progress, Planned, or Completed  
for the  
Rocky Flats Environmental Technology Site**

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# Introduction

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## **INTRODUCTION**

### **PURPOSE**

This photo briefing book describes completed, planned or on-going Demolition, Decontamination and Decommissioning (D&D) Projects, Deactivation Projects, and Remediation Projects. The photos will attempt to show work before, during and after. All planned D&D work photos will show existing (before). Each section, prior to the photos, will have a brief project purpose; following the purpose are the photos with a caption.

### **MISSION OF THE KAISER-HILL TEAM AT RFETS**

At Rocky Flats, the Kaiser-Hill team will make the site safe and clean it up. We will initiate the conversion of the site for beneficial use in a manner that is environmentally and socially responsible, secure and cost effective.

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**COMPLETED  
DEMOLITION, DECONTAMINATED AND  
DECOMMISSIONING PROJECTS**



**COLD GLOVEBOX 007 REMOVAL**  
**RM 152, B779**  
**10/94 - 12/94**

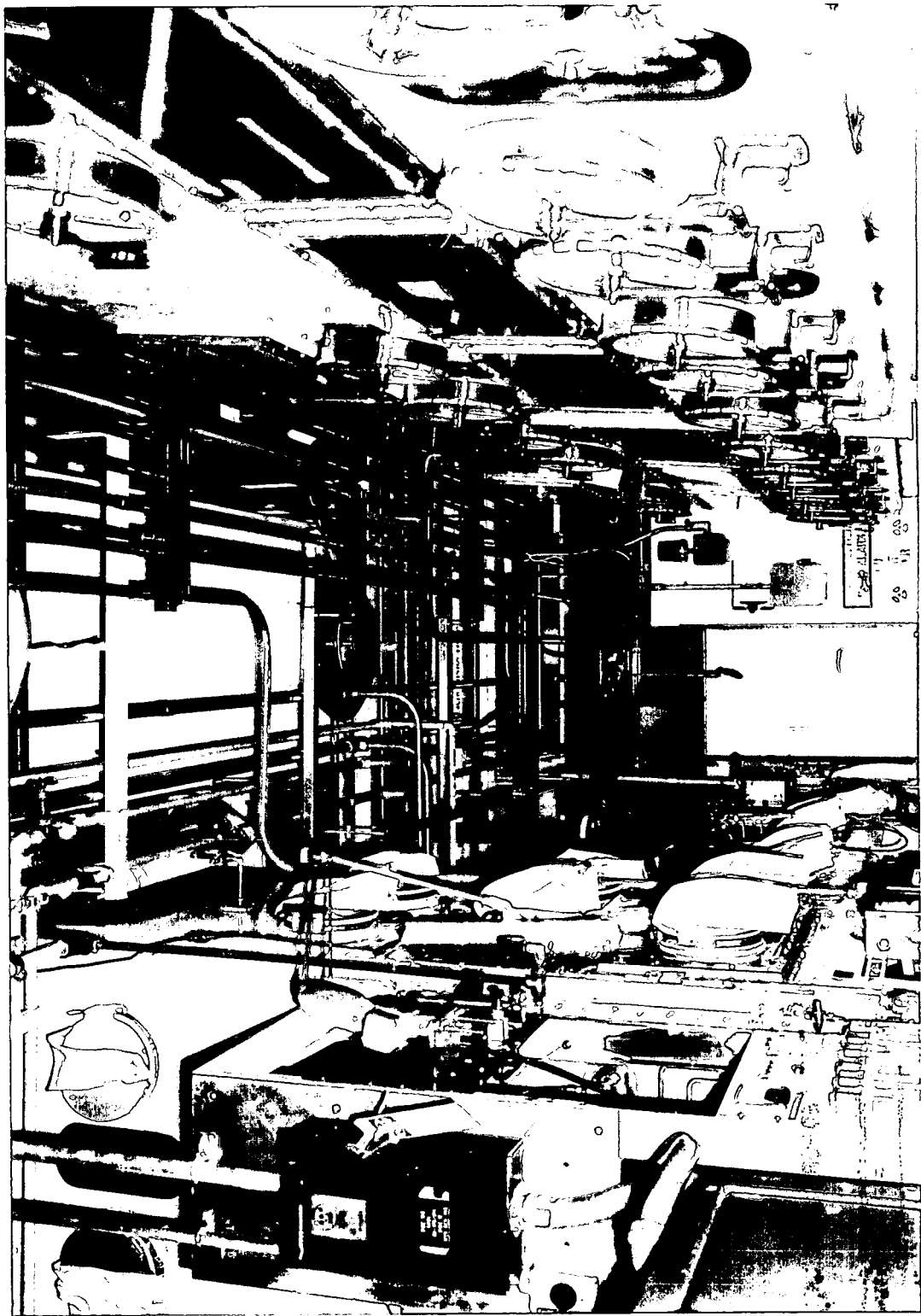
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COMPANY





## PROJECT PURPOSE/SCOPE

To remove Glovebox 007 and utilities piping from Rm 152 to use as a staging area for D&D work in Rm 154, the Hydride Lab.



**Figure 1:** (before) View of Rm 152 with gloveboxes, conduit and piping.

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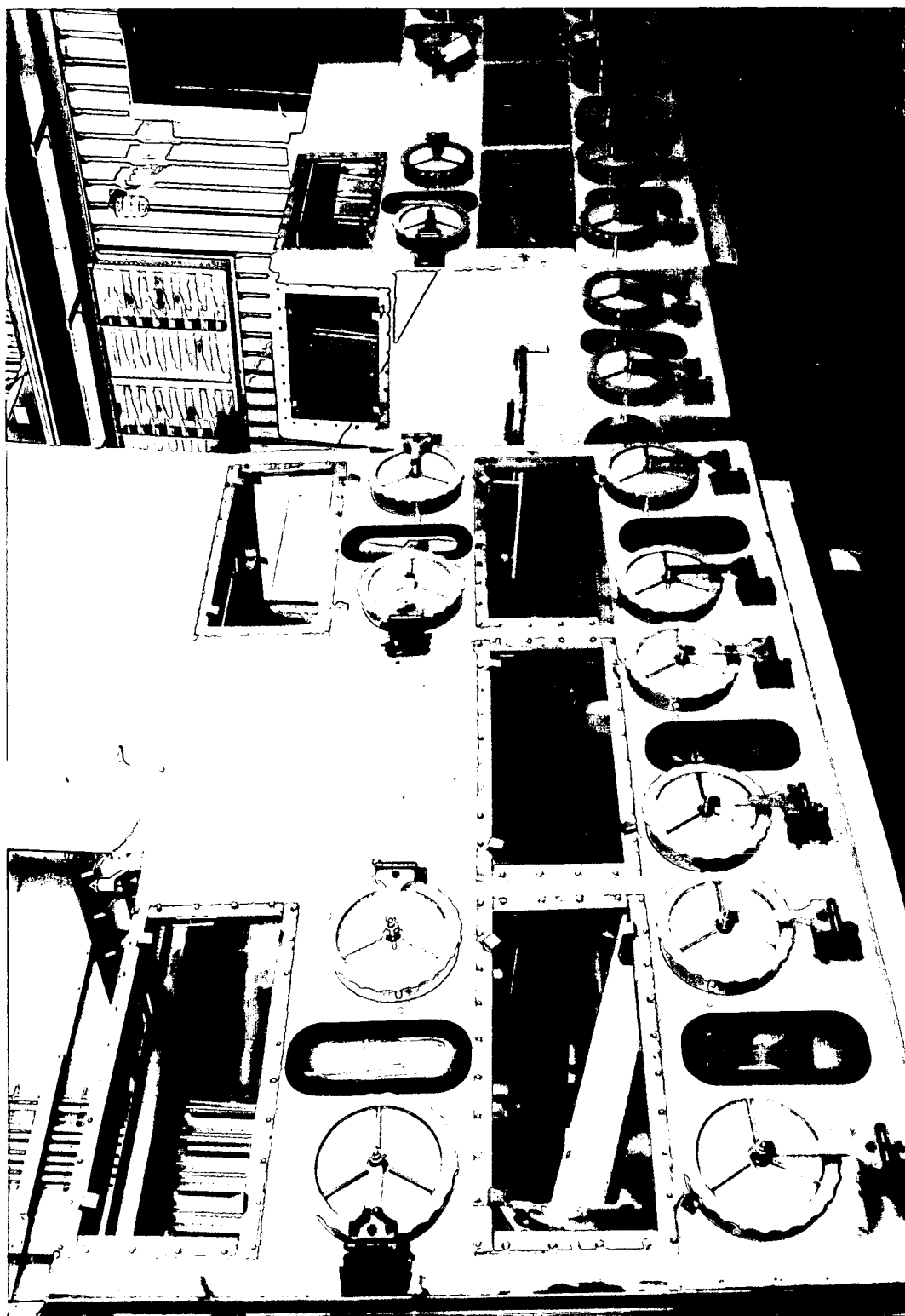


Figure 2: (after) Gloveboxes removed, with legs cut off and cut in sections for removal to outside of building.



DEC 15 1994

47157-00

A. J. F. W. J. W. J. W.  
BY: J. W. J. W. J. W.



**Figure 3:** (after) Rm 152 after gloveboxes removed, piping deactivated, room walls repainted, and glovebox legs grout removed.

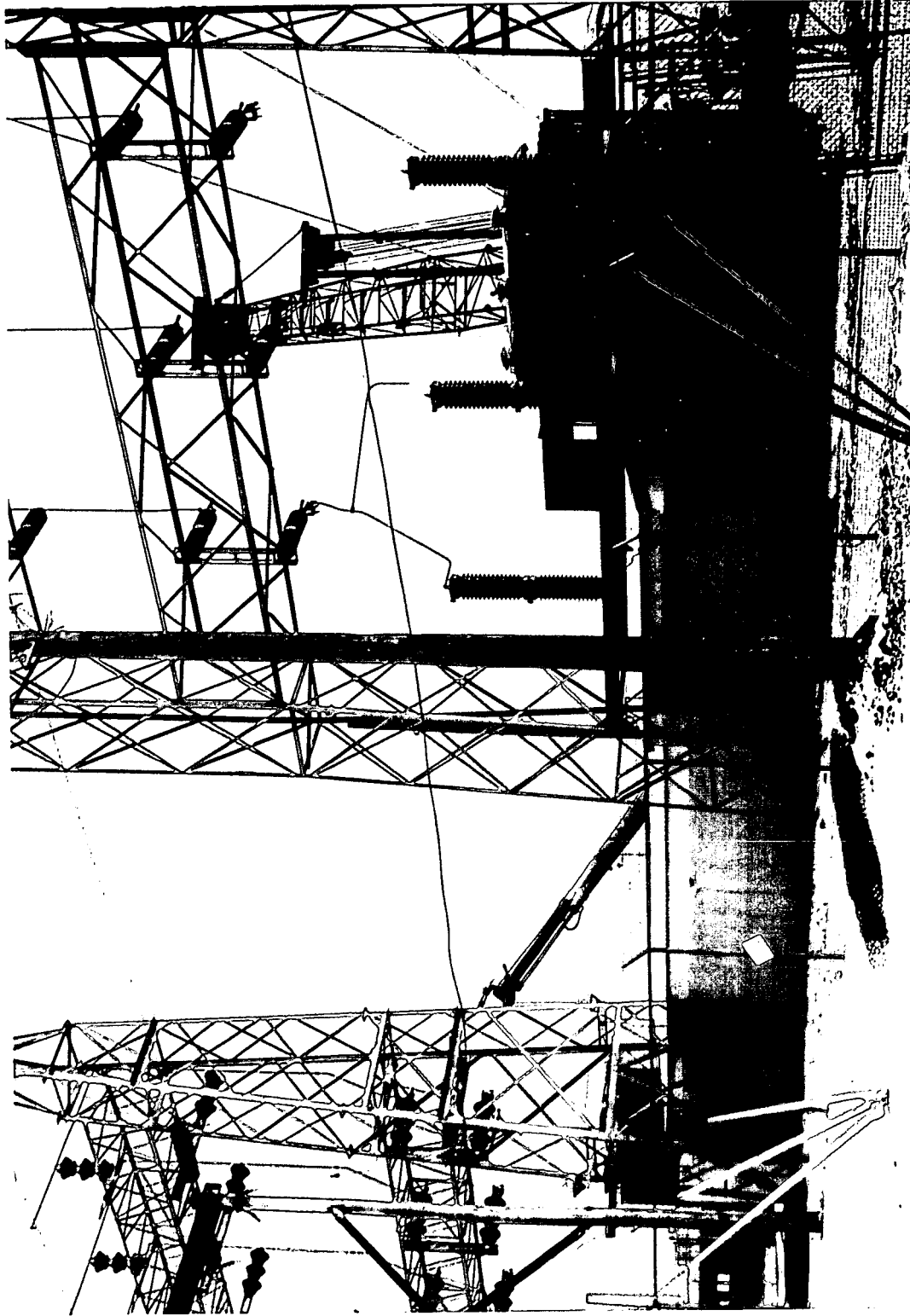


# SUBSTATION 555/558 DEMOLITION

10/95 - 3/96

## **PROJECT PURPOSE/SCOPE**

The purpose of this project is to remove Substation 555/558. The scope includes the removal of Polychlorinated Biphenyl (PCB) contamination at the site, the removal of asbestos material, reconfiguration of electrical power and signal lines, removal of electrical lines and poles, removal of two transformers, removal of equipment inside the substation, and demolition of the building and foundations.



**Figure 4:** (before) Looking northeast, Substation 555/558 showing Public Service 115KV line, Towers, Transformers and Substation Switch Building.

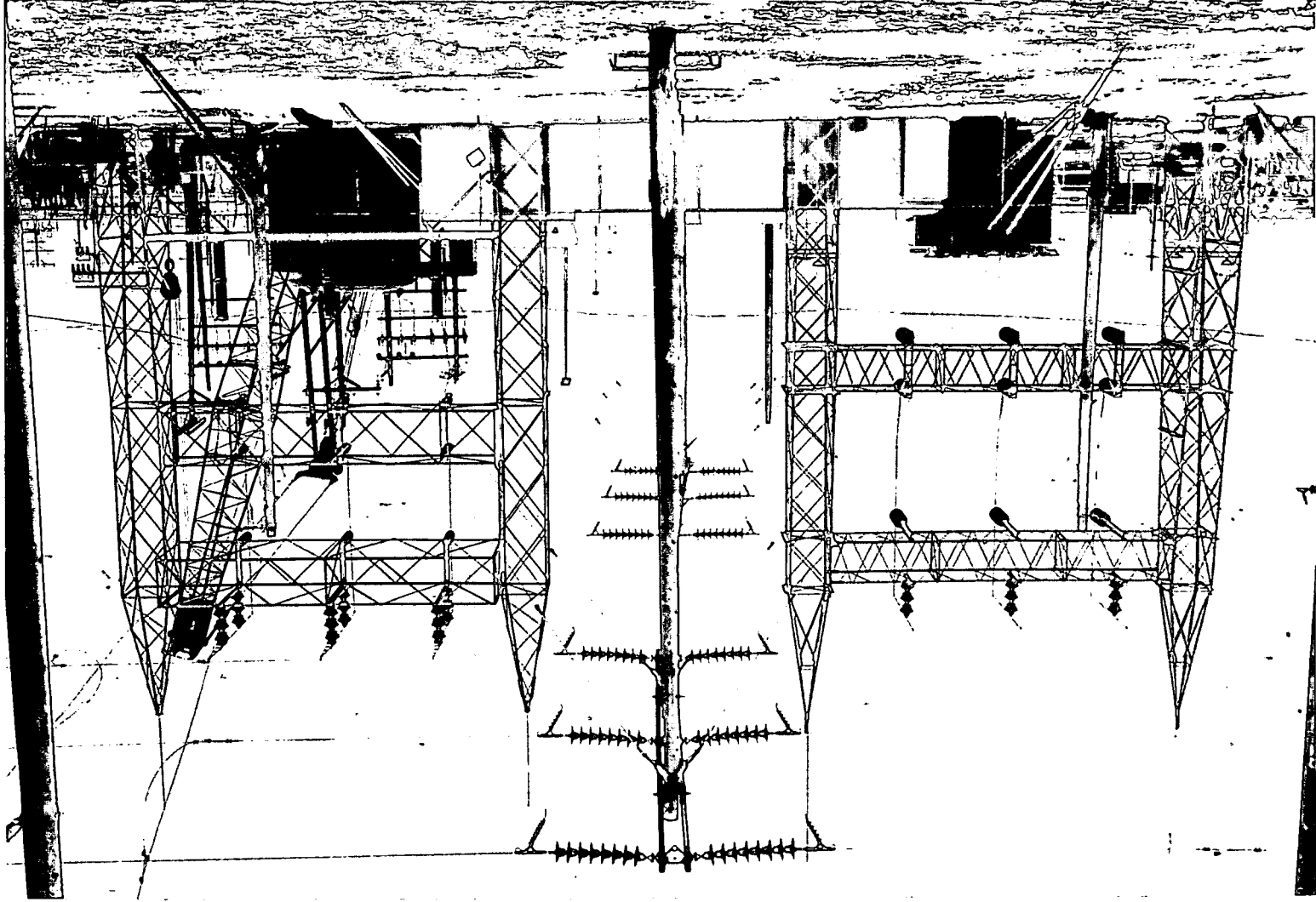
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Figure 5: (before) Looking northeast, Substation 555/558 showing Public Service 115KV line, Towers, Transformers and Substation Switch Building.



[illegible]

10-1-66

1. The first step is to identify the key components of the system. This includes understanding the hardware, software, and data involved.

2. The second step is to define the requirements. This involves determining what the system is intended to do and what it must be able to handle.

3. The third step is to design the system. This includes creating a detailed plan of how the system will be built and how it will be tested.

4. The fourth step is to implement the system. This involves building the system according to the design and testing it to ensure it meets the requirements.

5. The fifth step is to maintain the system. This involves monitoring the system for problems and making changes as needed.

6. The sixth step is to evaluate the system. This involves assessing the system's performance and determining if it meets the requirements.

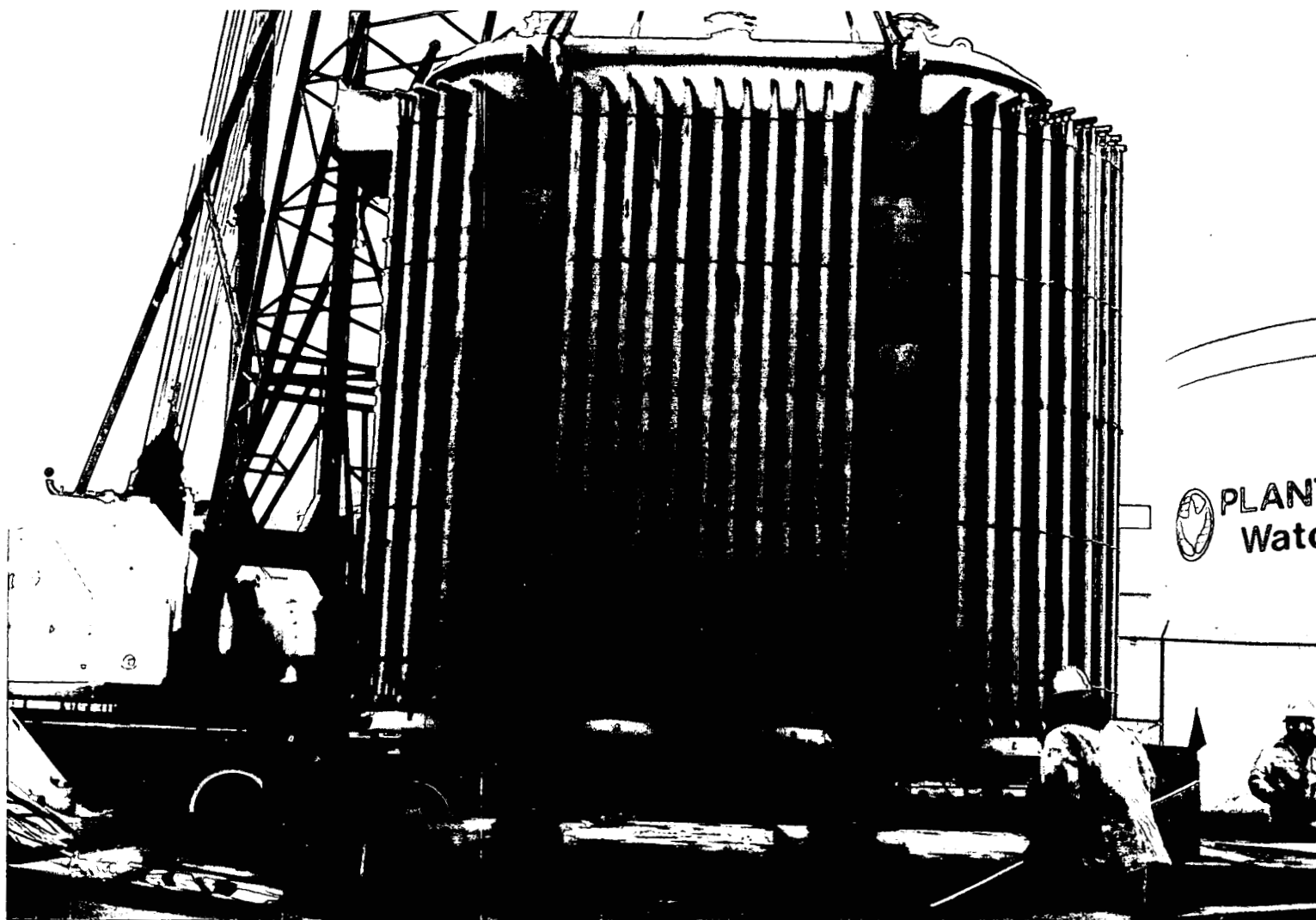
7. The seventh step is to document the system. This involves creating a record of the system's design, implementation, and maintenance.

8. The eighth step is to train the users. This involves teaching the users how to use the system and how to troubleshoot problems.

9. The ninth step is to support the system. This involves providing ongoing assistance to the users and making changes to the system as needed.

10. The tenth step is to retire the system. This involves decommissioning the system and archiving the data.





**Figure 6:** (during) Loading transformer from Substation 555/558  
on rail car for shipment off plantsite.

JAN-6 1996

48370-02

48370-02



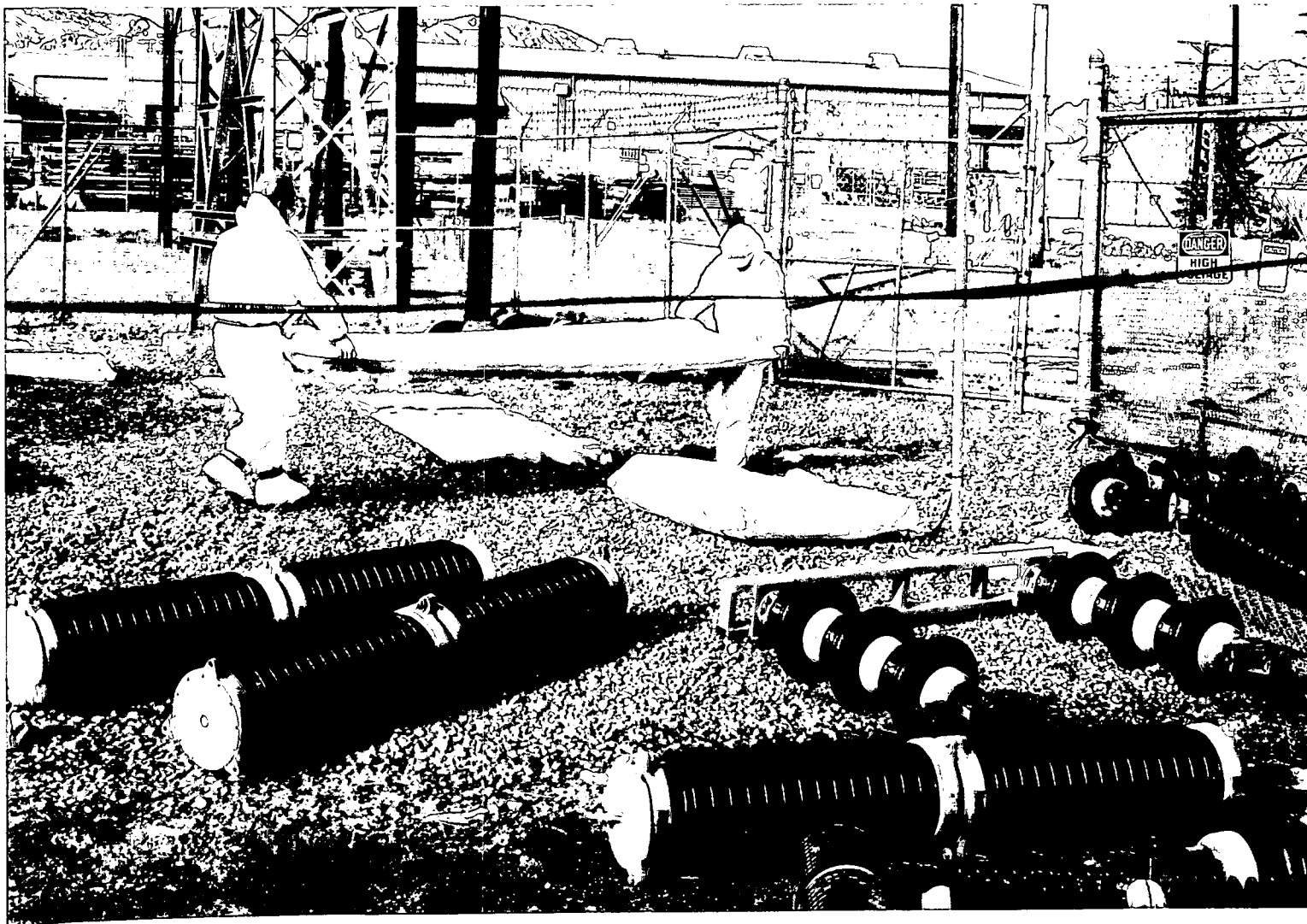
Figure 7: (during) Foundation of 115KV Tower being inspected by Engineering to verify size.

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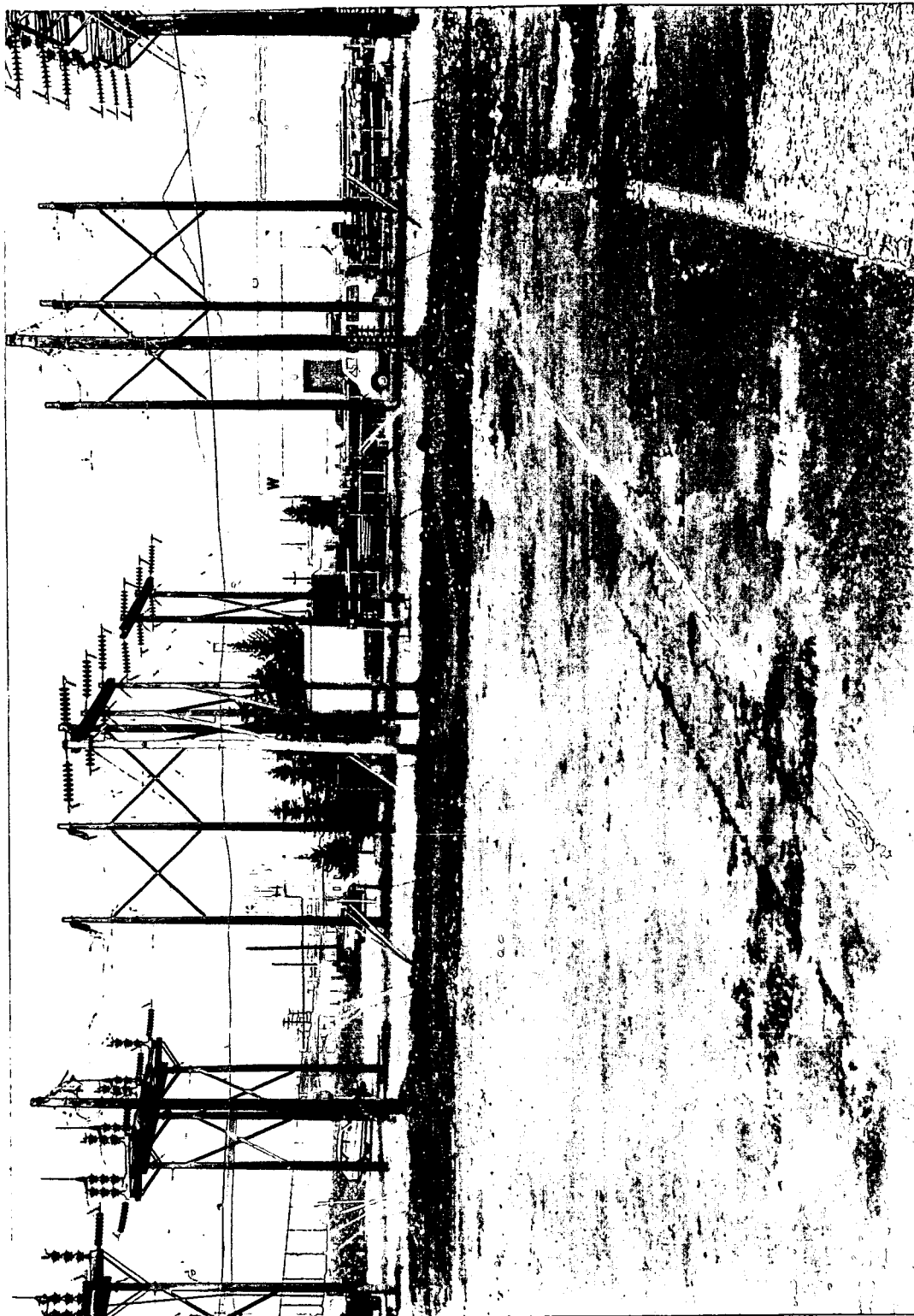


**Figure 8:** (during) Looking west at Substation 555/558 showing asbestos workers removing transite panels from roof of Switch Building.

JAN 11 1996

40377-01

40377-01



**Figure 9: (after) Looking west, completed demolition of Substation 555/558.**  
(Site will be used for new substation.)





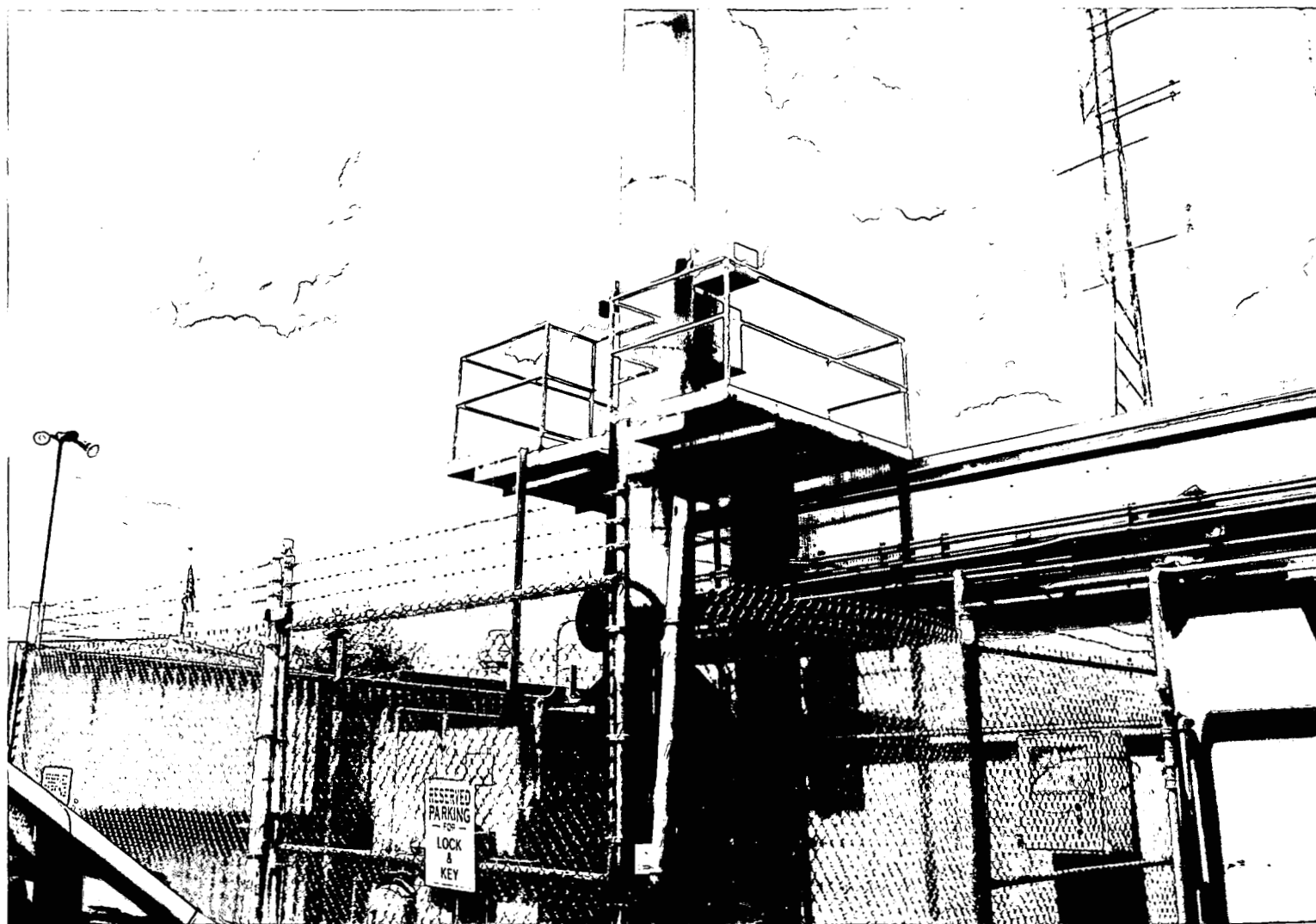


# D&D PILOT PROJECT #2, SECURITY INCINERATOR

December, 1994

## PROJECT PURPOSE/SCOPE

To decontaminate, remove from site, and recycle all usable materials. Incinerator was used to burn classified documents. Carbon-like paper contained PCBs. Interior of burn box was HEPA vacuumed of all ash. Waste generated consisted only of 160 sq. feet of asbestos transit board which served as a wind shield. All instruments, piping (gas feed -350'), fencing, etc., were diverted to steel recycling program.

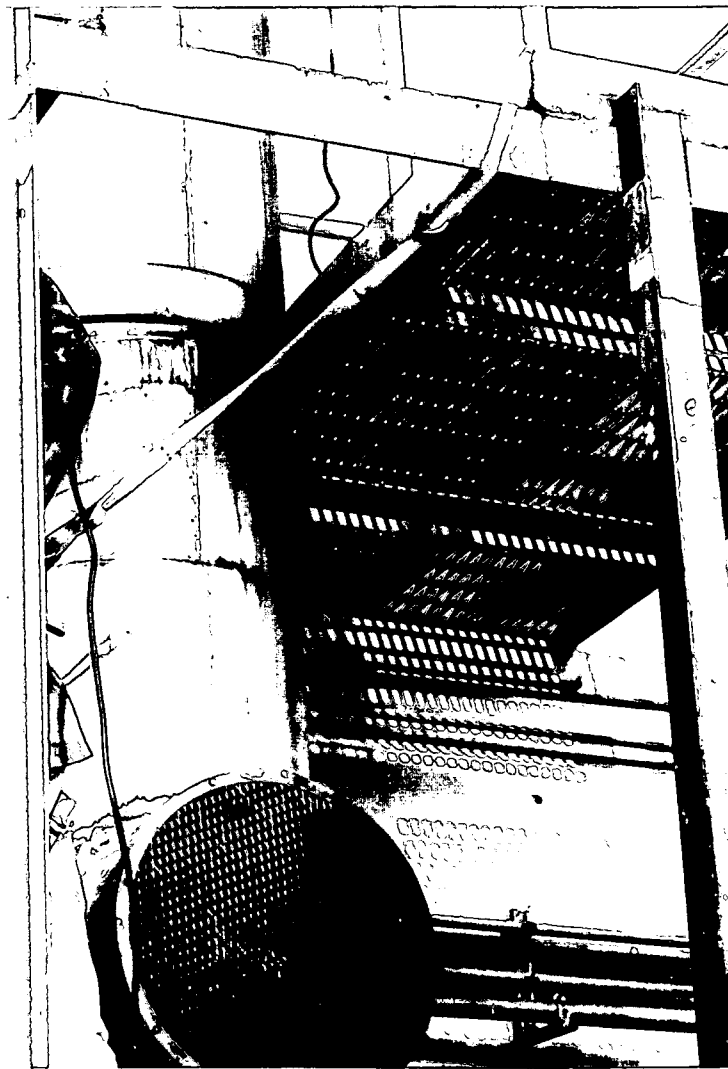
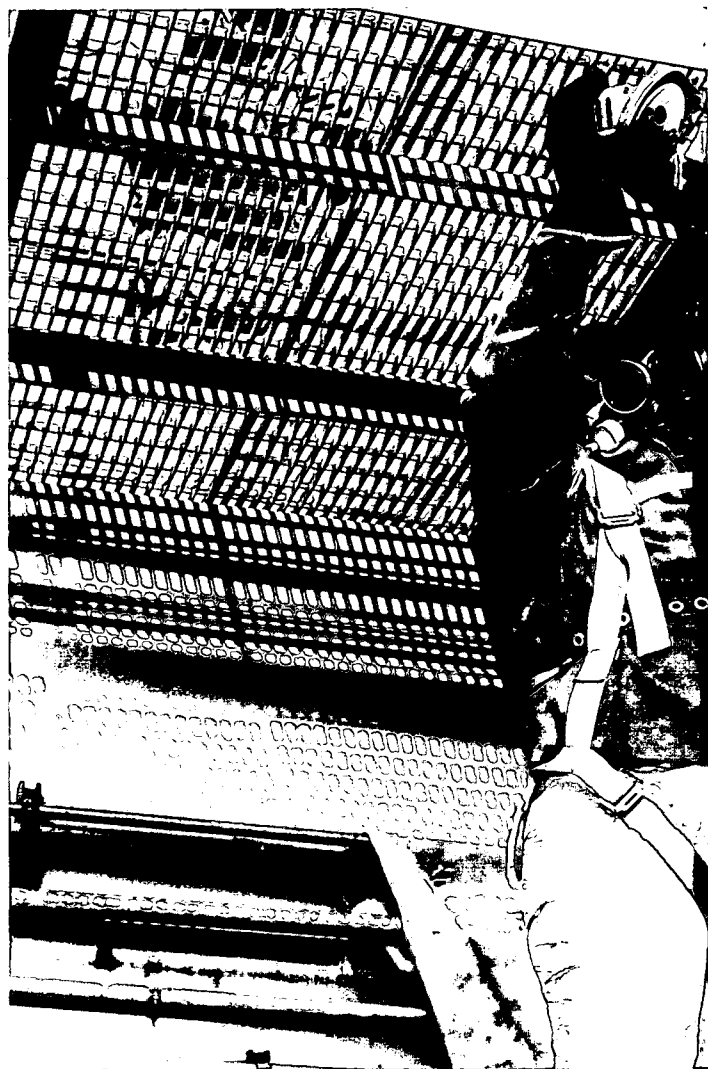


**Figure 10:** (before) View facing northwest gate. Incinerator and stack were both lined with firebricks. A possible buyer for the incinerator and stack was located prior to demolition.

JUL - 6 1 9 9 4

4 6 3 7 3 - 1 6

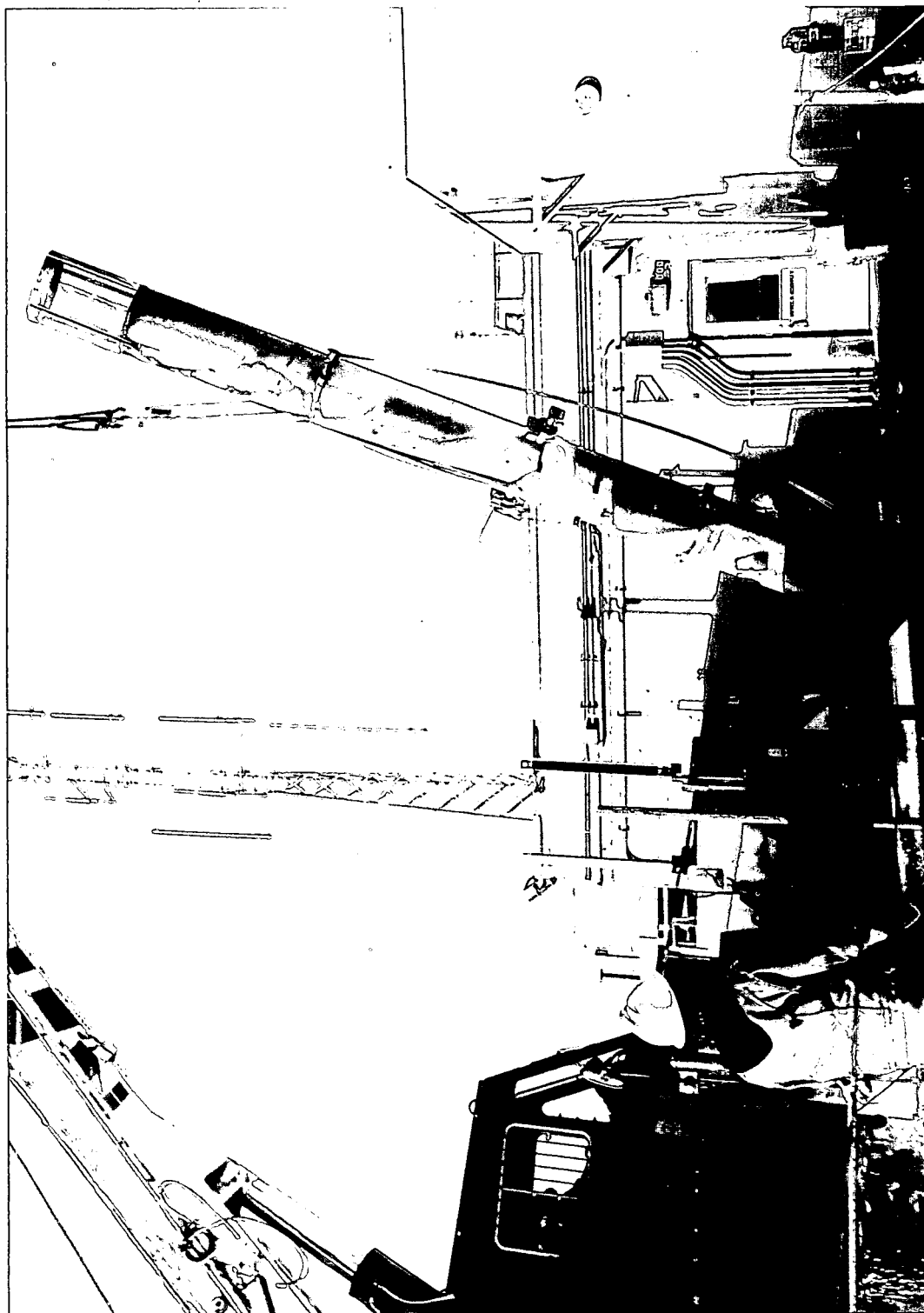
PT PROCHER



**Figure 11:** (during) View of worker facing north. Worker in respirator using portable band saw to cut grating free for removal with small crane. Worker is being monitored for lead exposure (from paint).

DEC 17 1994

47179-08  
FBI LABORATORY  
FBI BOSTON



**Figure 12:** (during) Facing north. Note two sections of grating have been removed. Stack was rigged with portable manlift and supported by crane prior to torch cutting base for removal.

Stack weighed approximately 7,000 pounds.

DEC 17 1994

ROCKY FLATS, I.

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1990



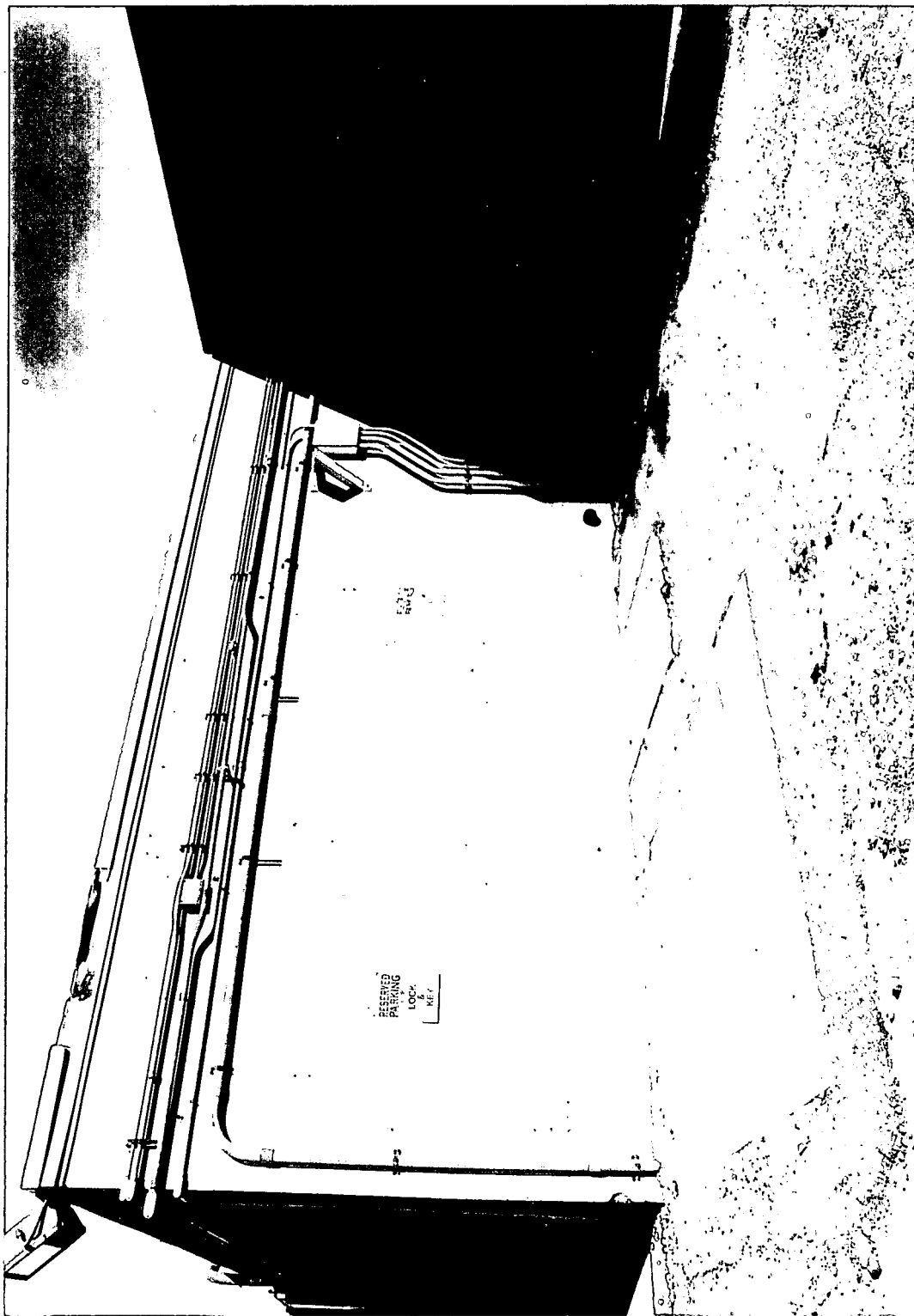


Figure 13: (after) View looking northeast at empty concrete pad.

JAN 18 1995

30 ROCKY FLIGHT

47328-12

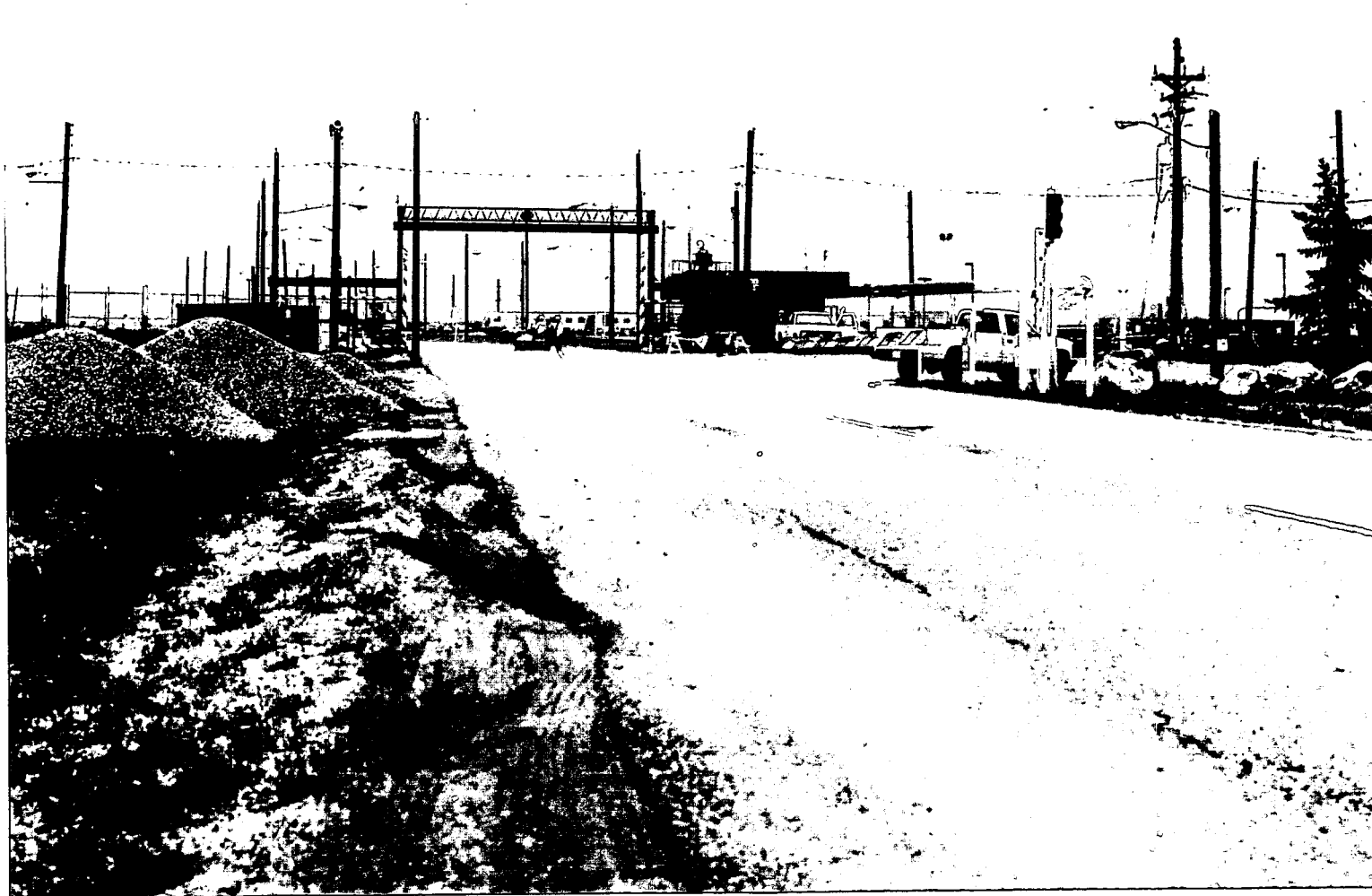
11/10/94 10:00 AM  
BY TUNBER

**DEMOLITION OF GUARDPOSTS**  
**100, 133, 900**  
**5/95 - 7/95**



## PROJECT PURPOSE/SCOPE

Demolish interior guard posts due to changing mission and security requirements at Rocky Flats.  
Scope: Demolition Activities with Engineering support: 1) Asbestos removal at 100/900 - friable and non-friable, 2) Electrical Stripout and Refeed, 3) Building demolitions 100/900 including auto gates, 4) Recycling of steel, copper, bullet proof glass, etc.  
Excess equipment removed/prepared for auction.



**Figure 14:** (before) Looking west at Building 100. Painter approaches Guardpost 100 to finish lead paint removal on automatic gate in preparation for torch cutting/removal.

Note: Demolition, cleanup of buildings, gates, etc., occurred from 6/30/95 to 7/1/95.

JUL 13 1995

NO ENTRY FLATS

47943-01

NO ENTRY FLATS  
NO ENTRY FLATS



**Figure 15:** (before) Looking east at Building 900. Note bullet proof glass against building. Electrical feeds have been locked out tagged out and grounded (grounds visible on left side of photo).

Note lineman working from bucket truck behind gate. Personnel in building are removing remaining equipment in preparation for demolition activities beginning June 30, 1995, in afternoon.

JUL 13 1995

ROCKY FLATS, II

47943-02

RECEIVED  
JUL 13 1995





**Figure 16:** (during) Looking west at Guardpost 900. Radiological Control Technician uses instrument ("fiddler") "Field Instrument Detector for Low Energy Radiation," to check soil disturbed from slab excavation (no findings). Komatsu tracked excavator in background.

JUL 13 1995

PROSODY FLATS

47942-06

BY PROSODY  
PR PROSODY



**Figure 17:** (during) Pictures taken minutes after Radiological clearance is given. Building is demolished and rubble loaded into 10 yard dump trucks for transport to onsite sanitary landfill. Note: Concrete rubble was recycled as erosion control rip rap on edge of landfill. Metal, structural was separated by excavator and placed into brown container (visible on right) for recycling.

47942-08

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Figure 18: (during) Building is down. Separation and loading of remaining material proceeds.

20 ROCKY FLATS.

JUL 13 1995

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BY NUMBER

**D&D PILOT PROJECT #1**  
**NaOH TANK REMOVAL**  
August, 1994

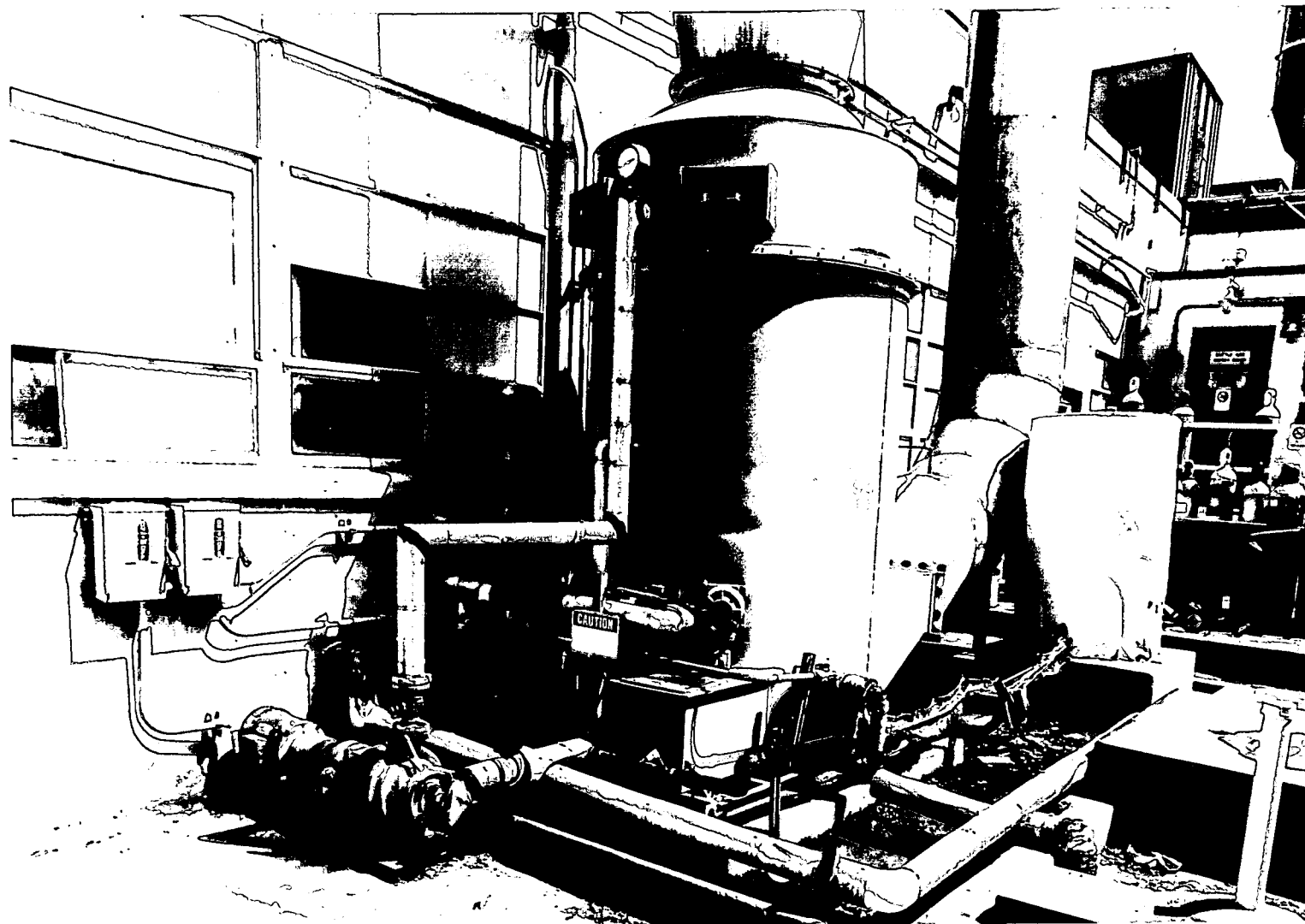
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## **PROJECT PURPOSE/SCOPE**

To remove two Sodium Hydroxide Tanks (with asbestos insulation)  
and the related piping.





**Figure 19:** (before) View looking northwest. One tank and piping visible on right. Tanks were verified as “clean” per sampling results. Asbestos on the tanks was encapsulated. One tank was placed inside the other and packed for disposal.

APR 13 1994

ROCKY FLATS

46009-11

BY HANDLER



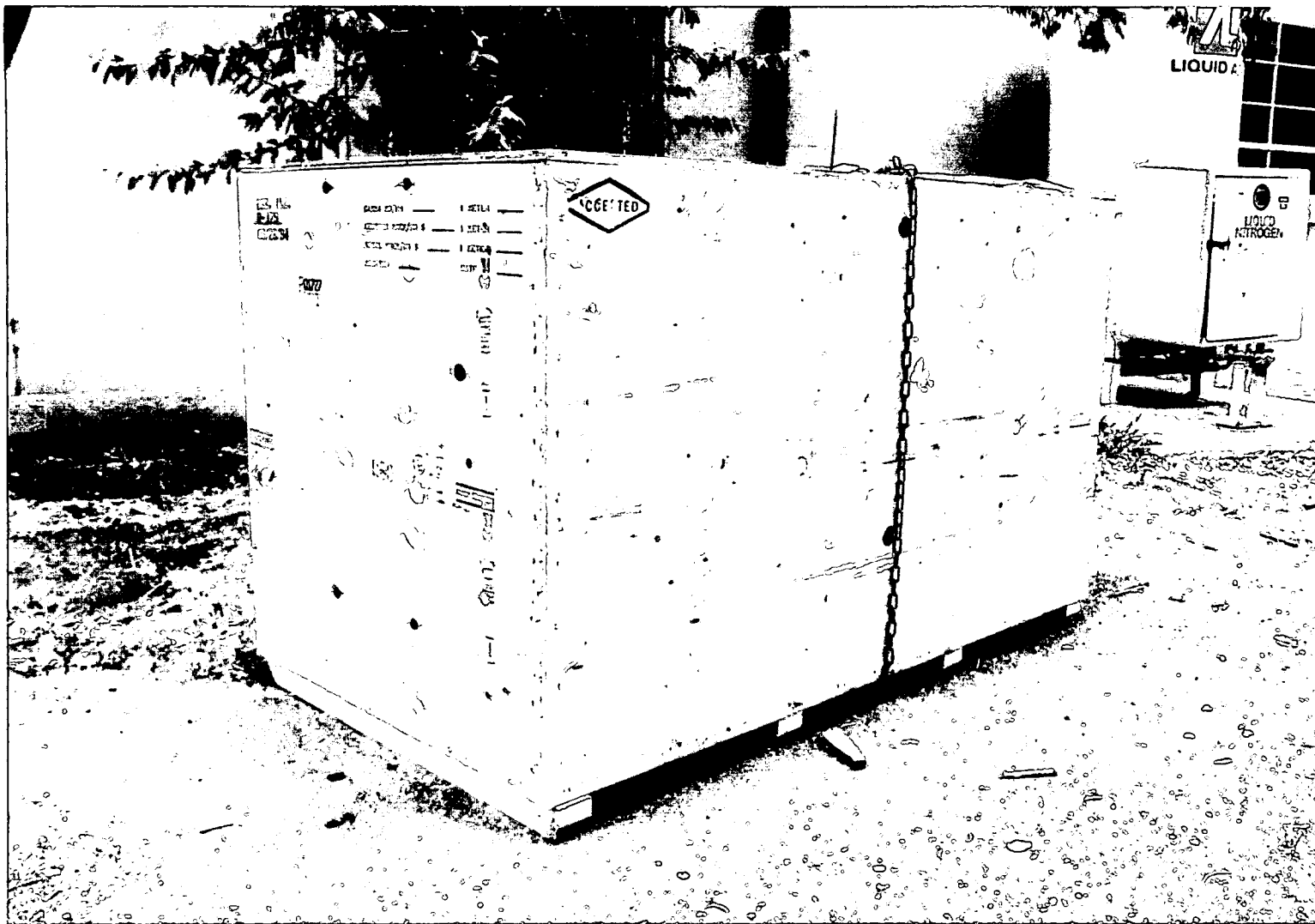
Figure 20: (after) View looking west at tanks pedestal.

AUG -9 1 9 9 4

4 6 6 2 0 - 1 2

BY TUNGER

4 6 6 2 0 - 1 2



**Figure 21:** (after) Standard waste crate, 4' X 4' X 8' long, used to dispose of tanks.

AUG -9 1994

136 ROCKY FLATS.

46620-07

PLEASE RECOVER  
BY FIELDER



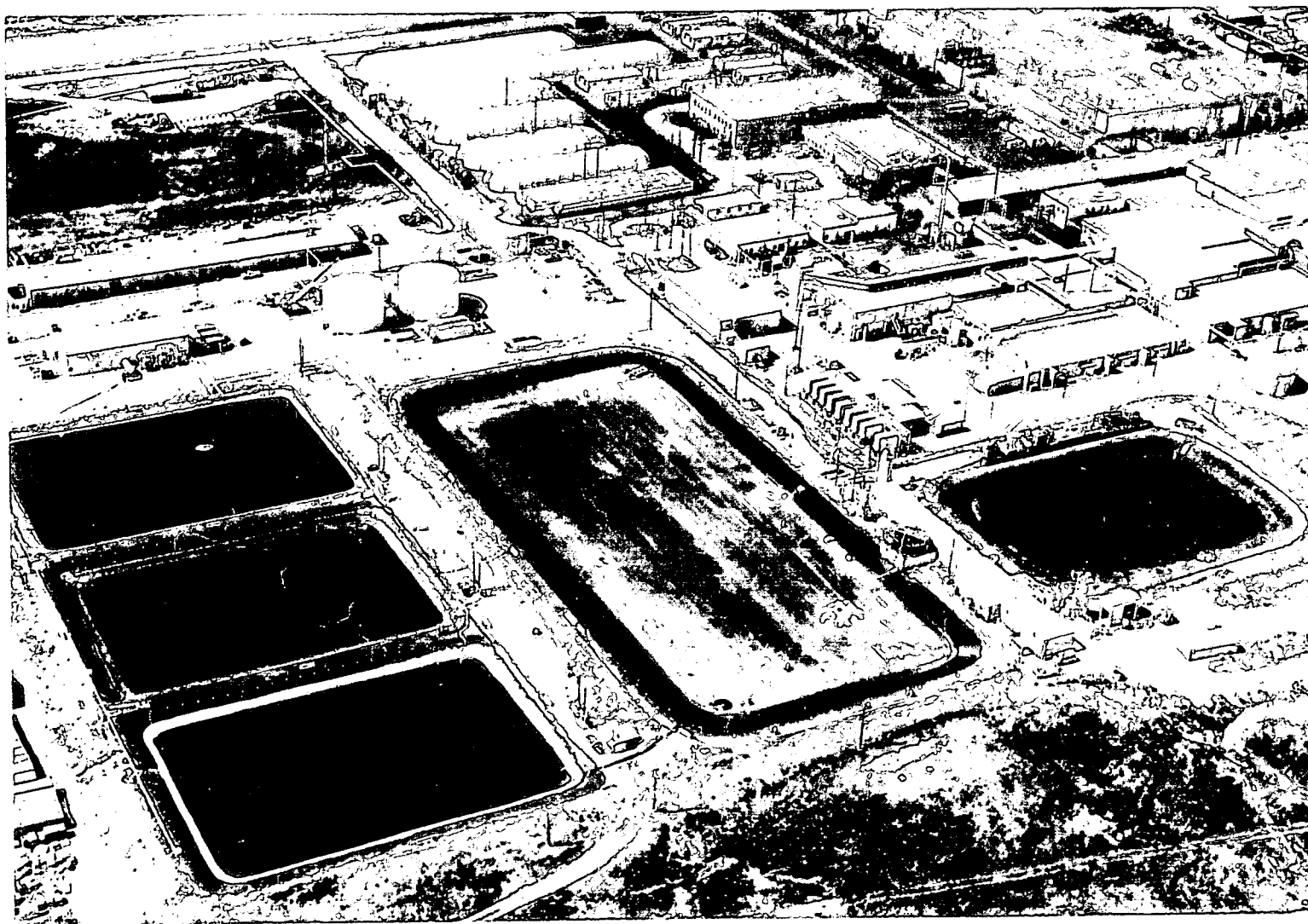
## REMEDIATION

**ACCELERATED SLUDGE REMOVAL PROJECT (ASRP)**  
**PONDS 207A, 207B, 207C**  
**2/94 - 9/95**



## PROJECT PURPOSE/SCOPE

This project consists of removing water and toxic sludge from Ponds 207A, 207B, (3) and 207C, which were constructed for treatment and storage of process water from industrial operations. The process water contained treated acidic wastes, industrial liquid wastes (e.g., metal plating solutions), and low level radioactive wastes.



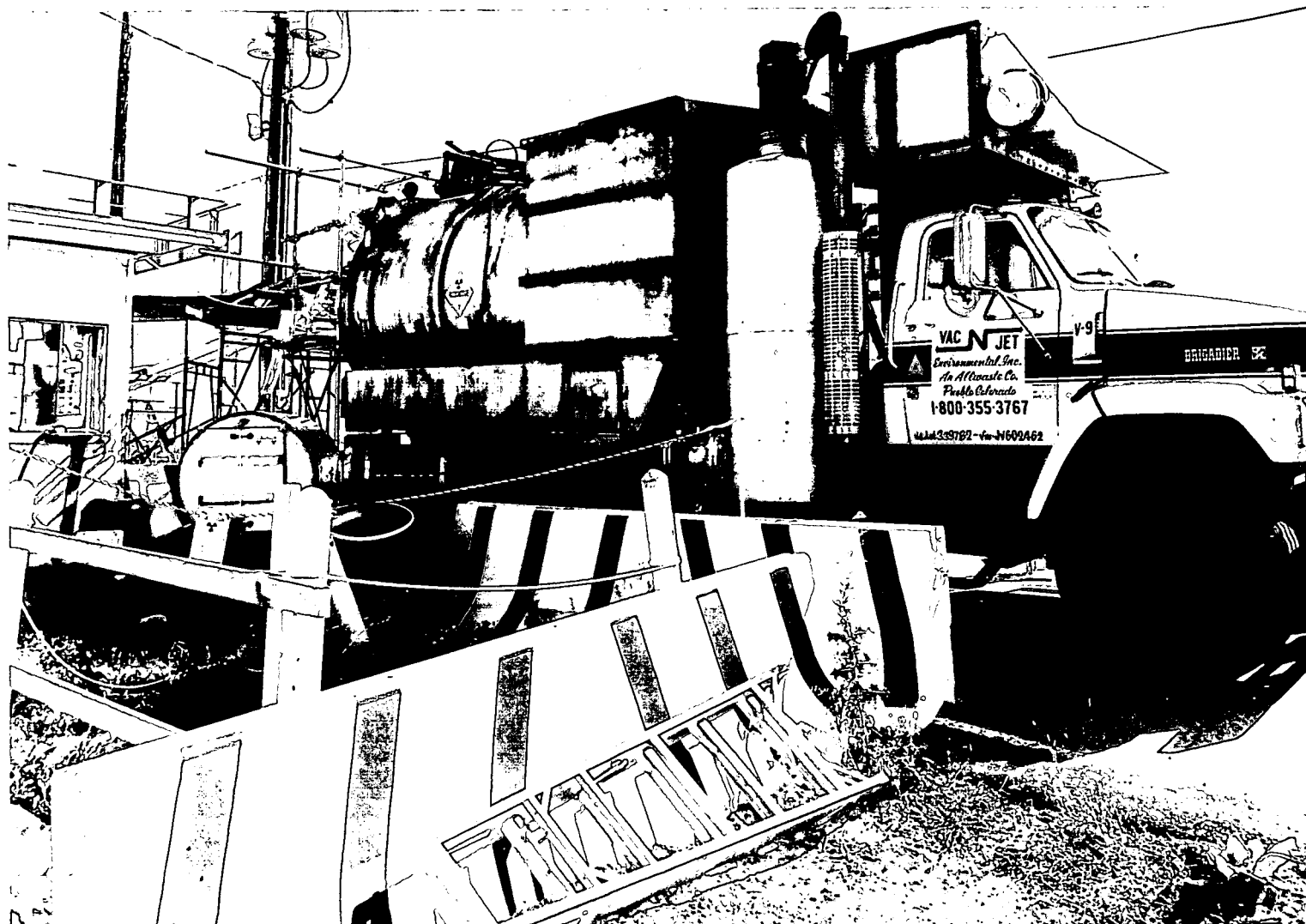
**Figure 22:** (before) Aerial view of the five ponds; 207A in middle, to the left (east), 207B (north, center, south), to the right (west), Pond 207C.

JUL -9 1993

NAVY FLATS, I

46853-20

3 AUGUST  
1993



**Figure 23:** (during) Vacuum trucks were used to transport sludge from the solar evaporation ponds to 10,000 gallon storage tanks located at the 750 pad tent structures.

LOS 26 1994

46792-04

FLATS, INC.

MEMBER



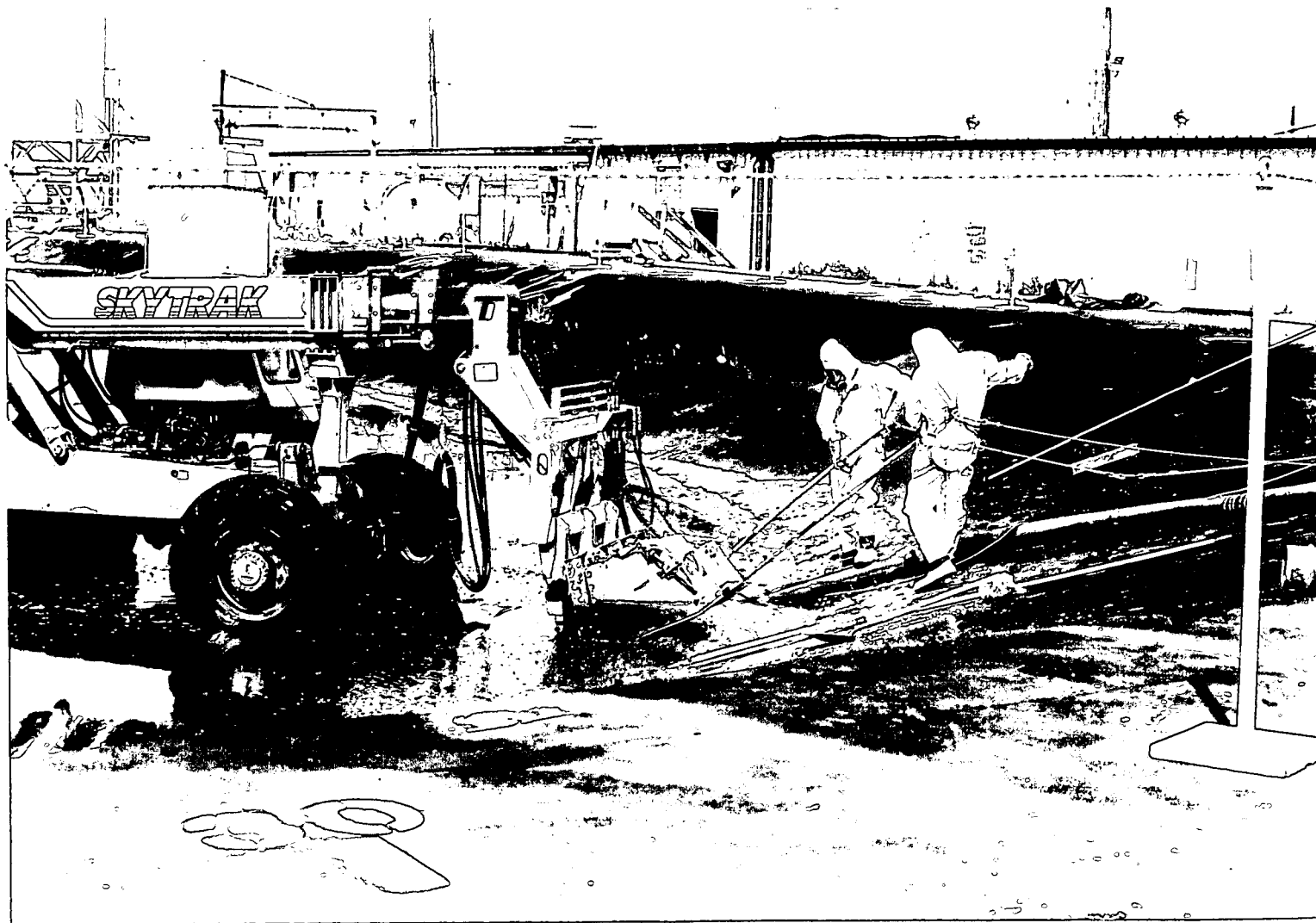
**Figure 24:** (during) “Saltbuster” (a four wheel drive vehicle) with rotomiller attachment was used to “slurry” sludge.

JUL 16 1994

RECEIVED FLATS, INC.

46692-06

RECEIVED  
FEDERAL  
RESERVE



**Figure 25:** (during) Saltbuster pushed sludge material toward vacuum nozzle to be conveyed through over-land transfer hose to vacuum truck.



AUG 24, 1984

CONCRETE FLATS, E

46791-07

REORDER  
NUMBER



**Figure 26:** (after) Depicts Pond 207B south pond after sludge removal activities were completed. Picture shows synthetic liner with perimeter ballast sandbags as a hold-down for liner.

US 26 1994

JOHN FLATS

46792-09

JOHN FLATS  
JOHN FLATS

50



# **GLOVEBOX 90, MOD D, B707**

**Completed 2/95**



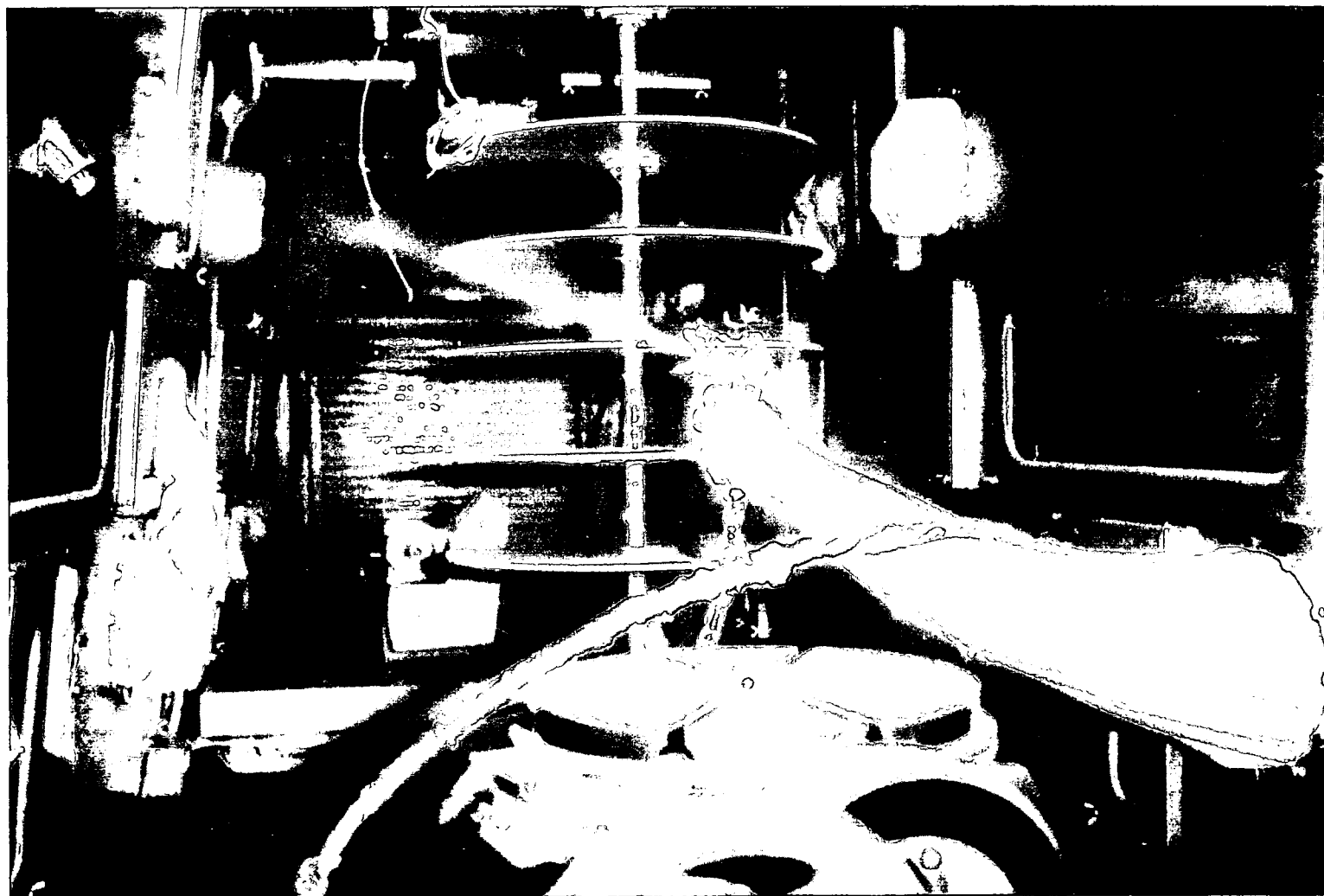
**Figure 27:** (during) Picture shows dried first coat of TLC, Glovebox 90 measures approx. 15'L X 3'W X 4'H. Approx. 12 gallons of stripcoat were applied to the interior surfaces and equipment to form the first strippable layer. Build-up of the first strippable thickness, took 4 coats, over one and one half days.

FEB -8 1995

PROPERTY FLATS, L

47612-02

PROPERTY FLATS, L  
47612-02  
PROPERTY FLATS, L



**Figure 28:** (during) Applying second coat of TLC, approx. 11 gallons. Application of the second coat was completed in one day. An airless sprayer was used for TLC applications, the Nova or SuperNova by Sherwin-Williams, .5 or .6 gpm throughout, an in-line filter, with a .016" to .023" diameter orifice. The .017" orifice tip was used in the evaluation after results of the mock-up testing.

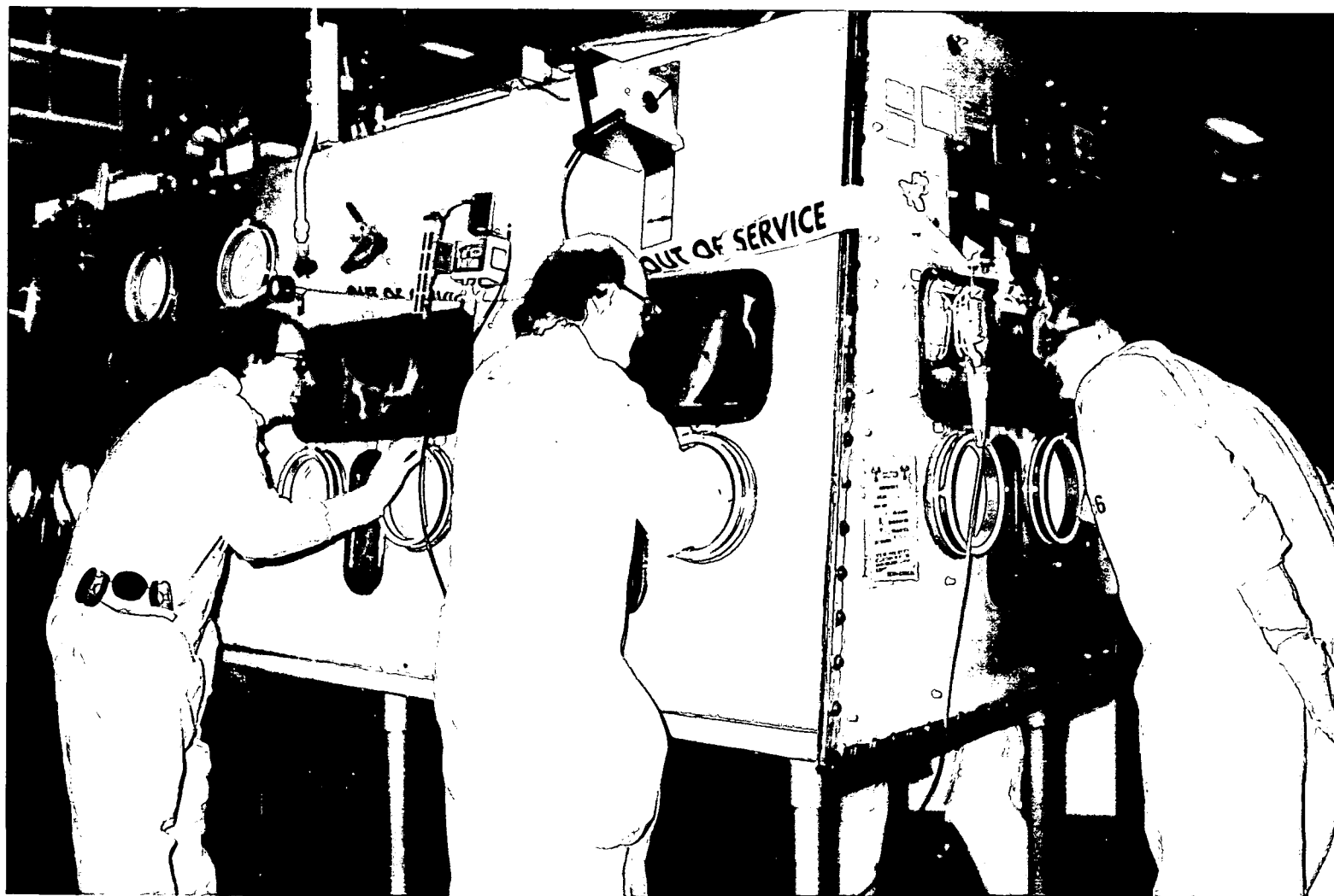
FEB 13 1995

ROCKY FLATS, CO

47611-21

WILSON  
CORNER





**Figure 29:** (during/after) Workers removing stripcoat. Significant amounts of material (powder and grease) were removed from crevices behind window frames, gasketed joints and the intricate geometry of the equipment inside of the glovebox. Removal of TLC resulted in long rope like pieces that could not be pulled apart by hand.

FEB - 8 1 9 9 5

25000 FLATS, E

47612-17

47612-17  
47612-17  
47612-17

# BUILDING 889 and SURROUNDING FACILITIES IN-PROGRESS D & D

KAISER-HILL  
COMPANY





# BUILDING 889, D & D

1/96 - 9/96

To D&D Building 889 and surrounding structures, and disconnect all utilities.

## PROJECT PURPOSE/SCOPE





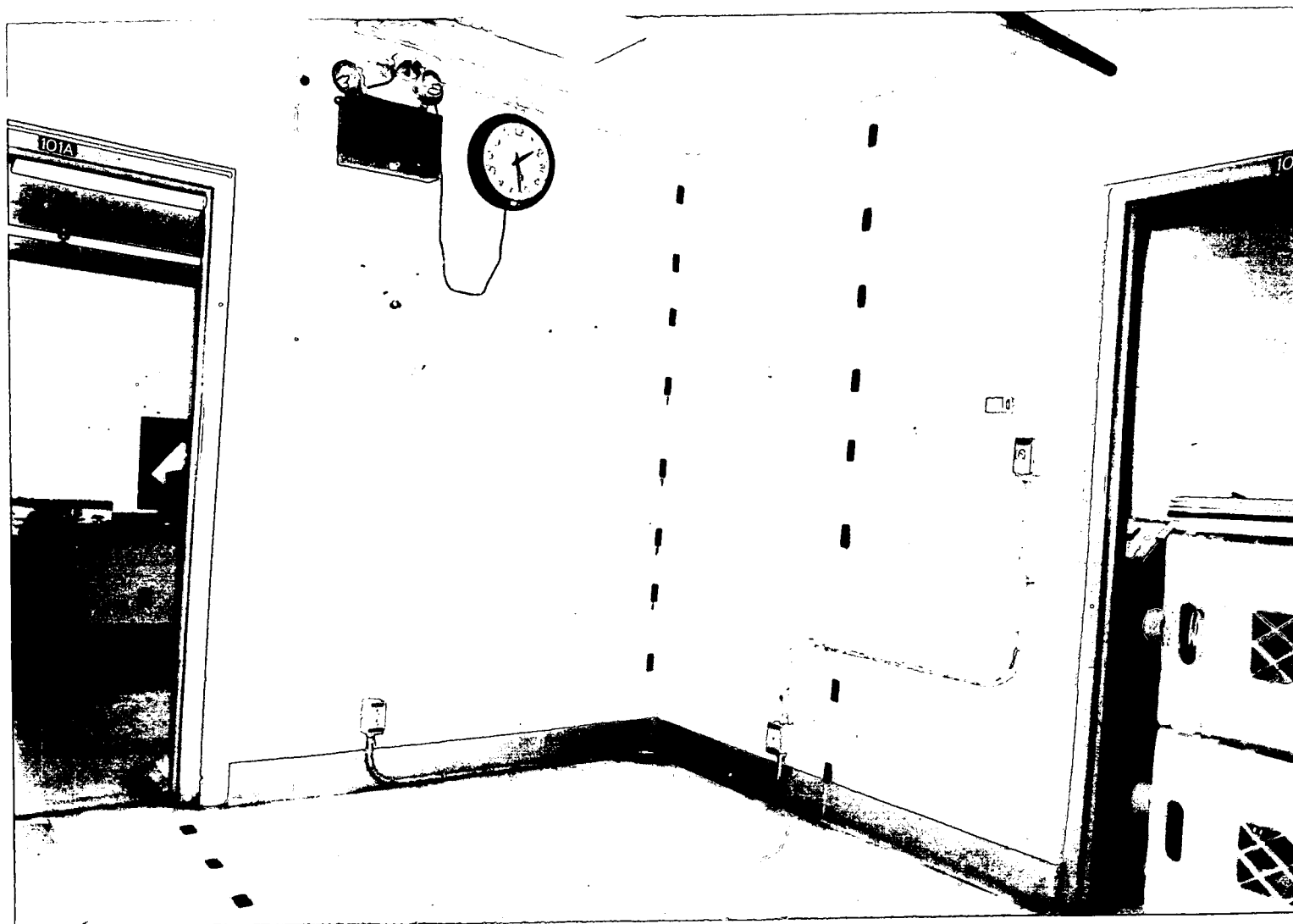
**Figure 30:** (before) This picture is the shower trailer that will be removed from inner plantsite to Property Utilization and Disposal (PU&D) storage site for future usage determination.

JM 16 : 995

47293-03

2200Y FLATS, E

10. 2. 2013  
10. 2. 2013



**Figure 31:** (before) An office area view inside of Building 889 that is gridded for hazard constituents characterization e.g., Pb, Ur, Asbestos, Be, etc. The entire building will be gridded, and samples will be taken for verification prior to demolition.



JUN 16 1995

47263-20

NOV FLATS

NOV 1995



**Figure 32:** (during) Waste stored in and around Building 889 has to be identified, then re-packaged and put into crates.

FEB 21 1995

EXHIBIT FLAG  
47603-15

ORDER



# BUILDING 886 PLANNED DEACTIVATION WORK



**BUILDING 886  
DEACTIVATION  
Planned FY 97**

29

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COMPANY

## PROJECT PURPOSE/SCOPE

Deactivate Building 886 MAA. Remove Uranium and Plutonium  
holdup and stabilize Rms 101 and 103.



**Figure 33:** (before)Rm 103 HEUN Storage Tanks. Raschig Ring Tanks will be cleaned and closed.

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FL 1992





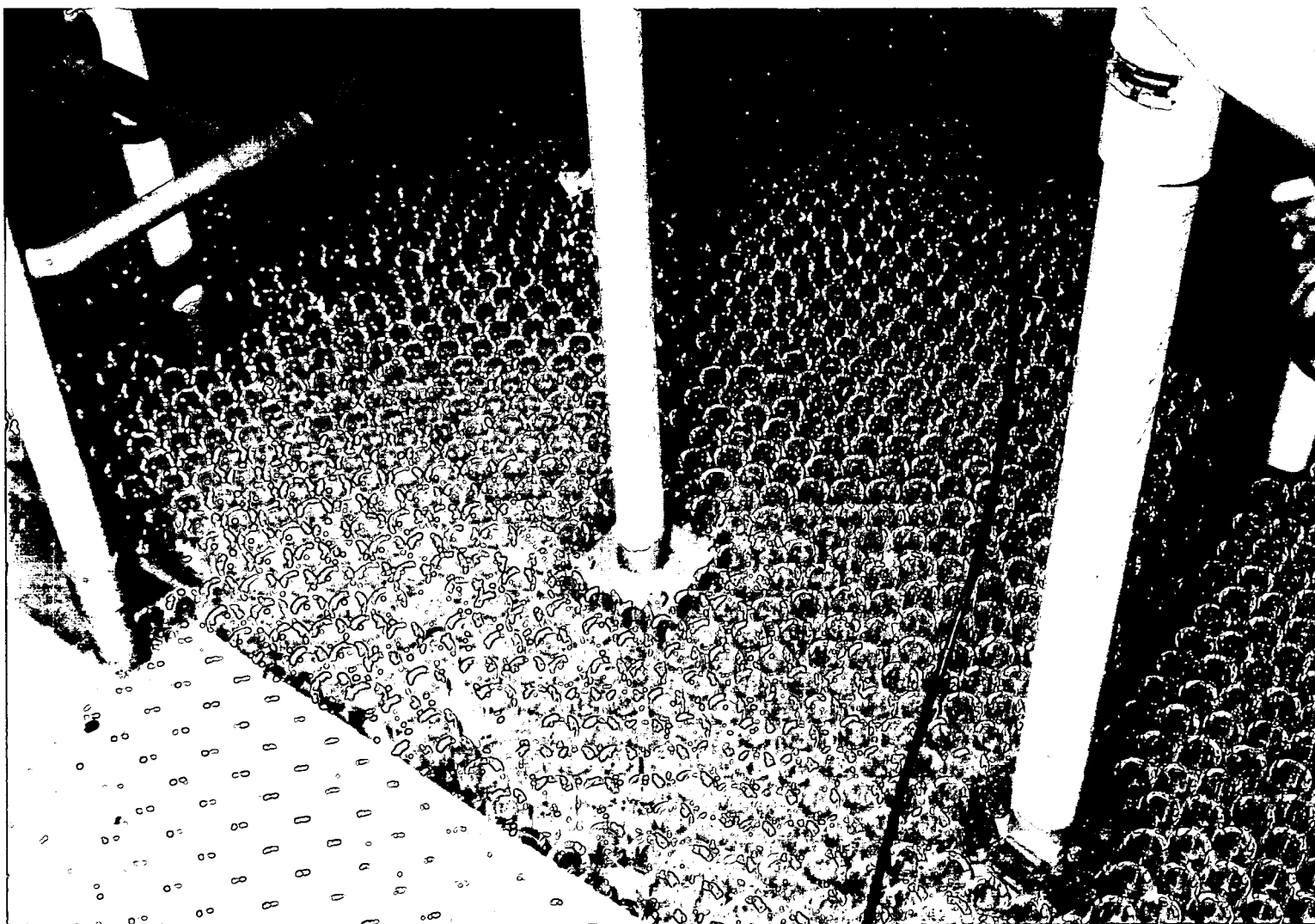
Figure 34: (before) Overhead of Rm 103, contaminated with Uranium.

JUL 15 1992

42662-04

NEW FLIGHT

NEW FLIGHT



**Figure 35:** (before) Floor in Pit Area of Rm 103, contaminated with Uranium and trace amounts of Plutonium.

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PROPERTY FLATS, E

JUN 15 1992

42871-06

PROPERTY FLATS, E  
JUN 15 1992

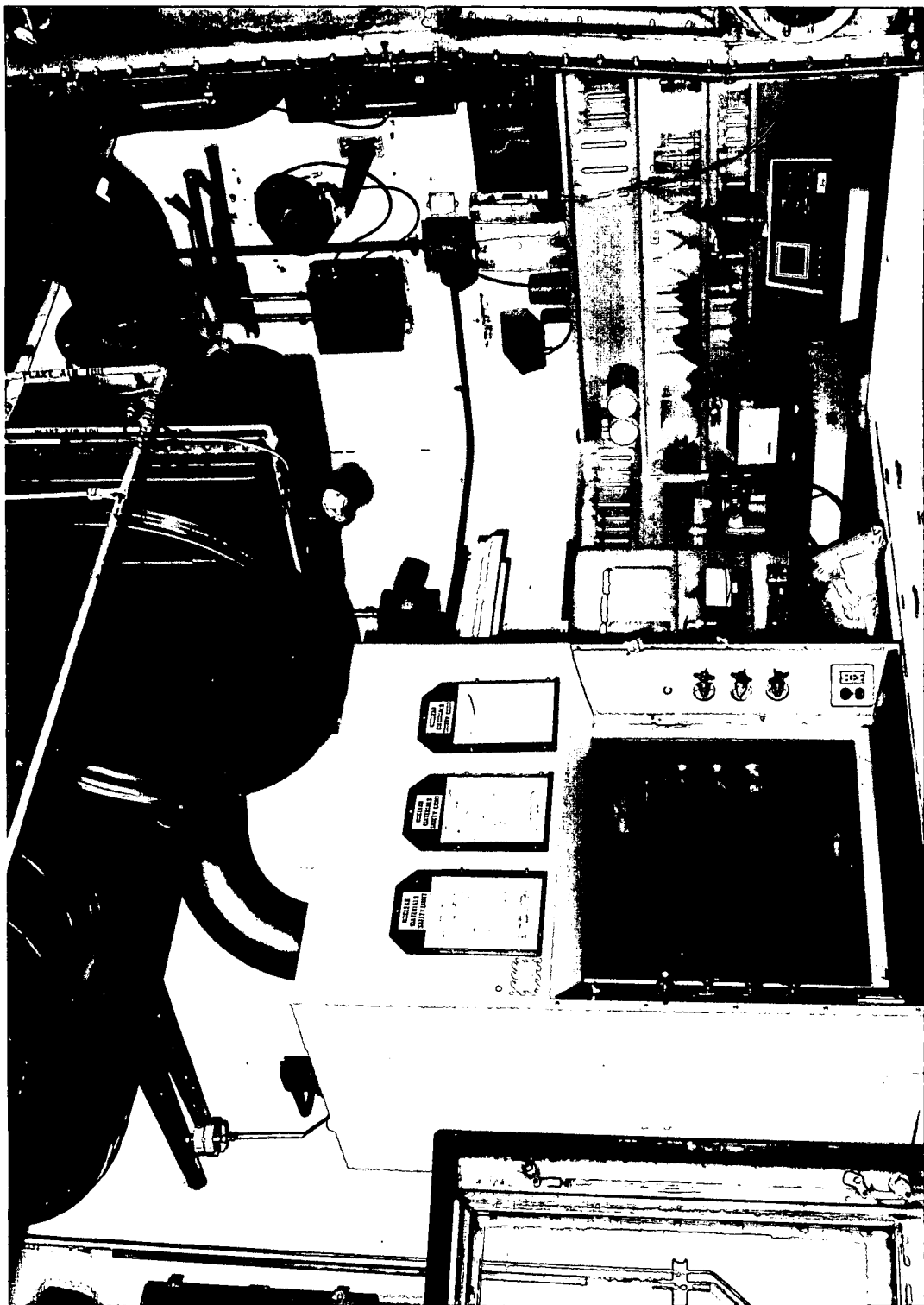


Figure 36: (before) Rm 103 mezzanine. Hood is contaminated with both Uranium and Plutonium holdup.



1960 ROBY FL 1100

JAN 15 1992

42868-07

1960 ROBY FL 1100



**Figure 37:** (before) Rm 103 Glovebox and downdraft in Rm 103 contaminated with Plutonium holdup.

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SECRET

JUL 15 1992

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SECRET



## SUMMARY

The Decommissioning Program at RFETS has the goal of providing the Department of Energy (DOE) with a means to plan and execute decommissioning projects by:

- Executing the decommissioning projects under a well planned program and controlling them as closely to schedule and budget as possible, and
- Maintaining a cohesive Decommissioning Program organization and routinely improving the program capabilities through execution of projects and acquisition of key resources.

The Decommissioning Program is progressing in both of these areas and has prepared the necessary planning to continue to do so. With a comprehensive decommissioning program, changes can be implemented as new federal and state regulations and DOE orders are issued. The establishment of a strong Decommissioning Program at RFETS will be a noteworthy accomplishment that will ensure timely, coordinated, and efficient decommissioning of systems and facilities at RFETS.

The current decommissioning projects under way at RFETS demonstrate how funding can be effectively used to clean up facilities that are contaminated from past activities. The Decommissioning Program has developed the infrastructure necessary to support a Decommissioning Program for FY97 and beyond. The continued funding and support for all of these activities, as well as the initiation and completion of decommissioning activities at other RFETS areas, will indeed demonstrate our pledge to maintain Kaiser-Hill's commitment to make RFETS safe for beneficial use in a manner that is environmentally and socially responsible, secure, and cost effective.